



**UNITED STATES DEPARTMENT OF COMMERCE**  
**Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

APPLICATION NO. 08/020,430	FILING DATE 07/09/97	FIRST NAMED INVENTOR ANTHONY P. LEON	ATTORNEY DOCKET NO. P-3141107
-------------------------------	-------------------------	---	----------------------------------

PATENT DEPARTMENT  
UNILEVER UNITED STATES INC  
45 RIVER ROAD  
EDGEWATER NJ 07020

IM21/0623

EXAMINER NESSLER, P
------------------------

ART UNIT 1761	PAPER NUMBER
------------------	--------------

06/23/98

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.

08/890498

Applicant(s)

Fenn et al

Examiner

Nessler

Group Art Unit

1761

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## Period for Response

A SHORTENED STATUTORY PERIOD FOR RESPONSE IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a response be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for response is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to respond within the set or extended period for response will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

## Status

- ☒ Responsive to communication(s) filed on 3/27/98
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 1-10 is/are pending in the application.
- Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1-10 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☒ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.
- ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).
- \*Certified copies not received: \_\_\_\_\_.

## Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s) 4, 7
- ☒ Notice of References Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other \_\_\_\_\_

Office Action Summary

Serial Number: 08/890490

Art Unit: 1761

Claims 1-4 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-4 recite a process; however, no process step is recited. Jepson claim format is suggested. Language such as "In a process for the production of a frozen food product comprising anti-freeze peptides, the improvement wherein. . .", etc., is suggested.

In claims 3 and 9, the abbreviation "AFP's" should be --anti-freeze peptides--.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Clemmings et al, Fletcher et al, or Warren et al, each in view of WO 92/22581 and applicants' admission.

Either Clemmings et al, Fletcher et al, or Warren et al disclose the use of antifreeze peptides in frozen confectionary products and mixes such as ice cream. The claims differ in the recitation of the aspect ratio. As admitted by the applicants in the first paragraph of page 2 of the specification, antifreeze peptides are known for their ability to influence the shape of ice crystals (according to WO 92/22581). The aspect ratio is considered to be a result effective variable, dependent upon, for example, the shape of the ice crystals formed and the desired degree of brittleness, absent a showing of unexpected results. It would have been obvious to utilize the antifreeze peptides of either Clemmings et al, Fletcher et al, or Warren et al, in the frozen

Serial Number: 08/890490

Art Unit: 1761

confectionary products of each of the primary references, to influence the shape of the ice crystals formed in order to provide a desired aspect ratio and a desired degree of brittleness.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-10 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9 of copending Application No. 08/8909453 in view of Clemmings et al, Fletcher et al, Warren, WO 92/22581 and applicants' admission. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims recite all of the features of the claims of the copending application with the exception of the range of the aspect ratio. The aspect ratio is purely a measurement of a physical phenomenon (i.e., the applicants did not invent the aspect ratio itself). Between both applications the applicants are apparently claiming nearly all aspect ratios possible (the present application recites aspect ratios in a range of more than 1.9, while the copending application recites ratios in a range of 1.1 to 1.9). Both sets of claims recite frozen food/ice cream containing

Serial Number: 08/890490

Art Unit: 1761

antipeptides, where the frozen food/ice cream inherently has an aspect ratio. WO 92/22581 discloses that antifreeze peptides are known for their ability to influence the shape of ice crystals, as admitted by the applicants, and also disclose their use in frozen foods. Therefore the aspect ratio is considered to be a result effective variable, dependent upon, for example, the shape of the ice crystals formed and the desired degree of brittleness, absent a showing of unexpected results. The ice cream of Clemmings et al, Fletcher et al, and Warren each inherently have an aspect ratio which falls within the range of nearly all aspect ratios possible.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection.

The applicants argue that the references do not disclose the aspect ratio range. However, as discussed above, the aspect ratio is purely a measurement of a physical phenomenon. All of the frozen foods of the references inherently have an aspect ratio. The aspect ratio is considered to be a result effective variable absent a showing of unexpected results as discussed above. An examiner's amendment was attempted prior to the discovery of the near-duplicate applications. Please note, as discussed above, that between the two applications the applicants are apparently reciting nearly all aspect ratios possible. The applicants argue that prior to the present invention, the use of antifreeze peptides in frozen foods was not known in commercial circles. However, the

Serial Number: 08/890490

Art Unit: 1761

references clearly disclose the presence of antifreeze peptides in frozen foods/ice cream, as well as their use to influence the shape of ice crystals. Since the aspect ratio measures this property, the choice of a desired aspect ratio to suit the desired degree of brittleness and shape of the ice crystals is considered to have been obvious absent a showing of unexpected results.

Any concerning this communication or earlier communications from the examiner should be directed to Cynthia L. Nessler whose telephone number is (703) 308-3843.

cn

June 21, 1998